UNITED STATES PATENT AND TRADEMARK OFFICE

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09/840,023	04/24/2001	Sung Lyong Lee	Q62058	4249

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EXAMINER
NATNAEL, PAULOS M

ART UNIT	PAPER NUMBER
2614	

DATE MAILED: 05/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>12 November 2004</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-8_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-8_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some *   c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims **1-8** are again rejected under 35 U.S.C. 103(a) as being unpatentable

over Morrison, U.S. Pat. No. 6,591,292 in view of Mendenhall et al. U.S. Pat. No.

6,570,626.

Claim **1** is a method claim of claim 2 and, thus, Claim 1 is rejected for the same reasons

as claim **2.**

Considering claim **2**, Morrison discloses the following claimed subject matter, note;

a) *an OSD source remote controller for generating an OSD object display command on*

a screen, is met by Remote Controller 125, fig.2, which a user may utilize to enable an

EPG to display and in response to the remote control signal, the System Controller 115

produces a signal OSD-RGB. (see col. 7, lines 63-67 and col. 8, line 66 through col. 9,

line 10)

b) an OSD source for transmitting OSD display data by giving each OSD display data a

peculiar ID in at least more than one OSD object unit and transmitting an OSD object ID

and display location information...if there is an OSD object display command from said

OSD source remote controller, *is met by the system controller 115 in transport System*

25, Fig.2, and by the disclosure that "The OSD menu may include an electronic program

guide (EPG) as described above and other features discussed below. Data representing

information displayed in the OSD menu is generated by system controller 115 in

response to stored program guide information stored graphics information, and/or

program guide and graphics information received via the input signal (e.g., StarSight

data)..." (see col. 9, lines 2-11 and see also col. 8 lines 60-62)

c) a display apparatus for storing at least more than one OSD object display data

received from said OSD source in a memory, reading OSD object display data having a

corresponding ID from the memory in response to received OSD object ID and display

location information, and displaying OSD object display data on a screen, is met by the

system illustrated on Fig.2 as a whole comprising the transport system 25 which

generates the OSD menu, decoder 85, storage devices 90 and 105, and of course by

the display screen as illustrated in Figures 4-7.

        Except for;

d) the claimed "transmitting an OSD object ID and display location information without

transmitting any of the OSD display data";

Regarding d), Morrison does not specifically disclose transmitting ID and display

location information without actually transmitting the OSD data itself. However, such a

method of transmission in order to save bandwidth is notoriously well known in the art of

video/audio data transmission.   In this regard, Mendenhall et al., teach an on-screen

display format that reduces memory bandwidth for on-screen display systems, wherein

some of the OSD image are represented by data sets that do not include a color

palette...[and] by not including a color palette in an OSD data set, the correspond OSD

image can be represented with a smaller data set and can be transferred across a bus

with a smaller bandwidth. (see Abstract) Therefore, it would have been obvious to the

skilled in the art at the time the invention was made to modify the system of Morrison by

providing the well known method of data transmission of Mendenhall wherein data

included in another OSD data set is used instead to draw the desired OSD image, so

that the system would save bandwidth and/or memory space by not transmitting the

entire OSD data all the time

Considering claim **3**, the OSD object display apparatus of claim 2, wherein the OSD

source comprises:

a) an MPEG source for supplying a detected MPEG transport stream to

the display apparatus, is met by the transport decode 55, fig.2;

b) an OSD generator for generating OSD display data in bitmap format, is met by the

controller 115, fig.2;

c) a register for storing data, is met by the Smart Card 130, fig.2;

c) a controller for controlling the MPEG source, the OSD generator, and

the register, is met by system controller 115 as well.

Considering claim **4**, the OSD object display apparatus according to claim 3,

wherein the register is an output asynchronous plug register, is met by the Smart Card

130, fig.2;

Considering claim **5**, a command input part for receiving a command signal from the

OSD source remote controller and providing the command signal to the controller, is me

by the remote input interface 120, fig.2.

Considering claim **6**, the OSD object display apparatus of claim 2, wherein the

display apparatus comprises:

a) an MPEG decoder for decoding an MPEG transport stream and outputting image

data, is met by the Transport Decoder 55, fig.2;

b) a buffer for buffering OSD data, is met by Packet Buffer 60, fig.2;

c) an overlapper for overlapping the image data and the OSD data and providing

overlapped data to the screen, is met by Application Interface 70, fig.2;

d) a controller for controlling the MPEG decoder, the buffer, the overlapper, the

memory, and the screen, is met by system controller 115, fig.2;

Considering claim **7**, the OSD object display apparatus according to claim 6, wherein

the OSD object display apparatus further comprises: a display apparatus remote

controller, is met by remote control unit 125, fig.2 or Remote controller 1125, fig.1;

Considering claim **8**, a command input part for receiving a command signal from the

display apparatus remote controller and providing the command signal to the 5

controller, is met by Remote Unit Interface 120 fig.2 or IR Receiver 1122, fig.1;

Response to Arguments

3.   Applicant's arguments filed May 25, 2004 have been fully considered but they are

not persuasive. The applicant argues that

"...although Mendenhall discloses not transmitting the color palette, Medenhall's

system does transmit the pixel data portion of each of the OSD data sets. See FIG. 12

of Mendenhall. "The pixel data includes a value associated with each OSD pixel that

specifies which color from the color palette is to be applied by the audio and video

decoder to that pixel." Col. 2, lines 27-32. In other words, the pixel data is part of the

OSD display data. Thus, even though some of Mendenhall's data sets are transmitted

without the color palette, all of the data sets include OSD display data, i.e., the pixel

data."

However, to the contrary, the examiner submits that the above quoted statement

(col. 2, lines 27-32 of Medenhall) actually indicates to the skilled in the art that the pixel

data includes <u>a value</u> and this value is a control information, as is well known in the

computer art, because the value is used to specify which color is to be applied by the

decoder. Furthermore, this information (or value) would not be needed or used when (or

if) the color palette is not transmitted, as Mendenhall clearly proposes or teaches. col.

3, lines 28-50 [Note: "Value", as is being correctly interpreted here, is "a numerical

quantity that is assigned or is determined by calculation or measurement", (see

Webster's dictionary, 10th edition]. Therefore, to those with ordinary skill in the art it

would be obvious to modify the system of Morrison utilizing the teaching of Mendenhall

as has been shown above in the rejection. The argument is thus unpersuasive.

Conclusion

4.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paulos M. Natnael whose telephone number is (571) 272-7354. The examiner can normally be reached on 10:00am - 6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571)272-7353. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PMN
May 11, 2005

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